

# Trimmer

Owner's Manual

IMPORTANT: Please read this manual carefully before operating your Trimmer.

## INTRODUCTION

Before operating your RedMax® Trimmer, read this manual carefully and completely. This manual will provide you with a full understanding of the necessary instructions for assembly, operation and maintenance of the equipment. For continued safe and reliable operation, use only parts supplied by manufacturer. Adhere to all notes and warnings:

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## 1. For Safe Operation

#### Know your unit

- \* Read this Owner's Manual carefully until you completely understand and can follow all safety notes, precautions, and operating instructions before operating the unit.
- \* Restrict your unit to users who understand and follow all safety notes, precautions, and operating instructions found in this manual. Children should not be allowed to operate this unit.

#### Plan ahead

- \* Always wear eye protection such as safety goggles. The shiled/line limiter will not prevent rocks or debris from being thrown or ricocheting into eyes and face which could result in loss of vision or serious personal injury.
- \* Dress in a long-sleeved shirt and long pants and wear boots or safety shoes. Wear leg guards when cutting large or thorny material. Do not wear loose clothing, jewelry, short pants or sandals. Do not go barefoot.
- \* Guard against hazardous situations at all times. Warn adults to keep pets and children away from the work area. Establish a safe method for gaining your attention during operation. Be careful if you are approached.
- \* Keep children, pets, and bystanders a minimum of 30 feet away when starting or operating the unit.
- \* Do not operate the unit when you are tired, ill, or upset; or if you are under the influence of alcohol, drugs, or medication.
- \* Inspect the area to be cut before each use. Remove all debris and objects that could be thrown, become entangled in the cutting head, or cause damage during cutting.

#### Handle fuel with caution

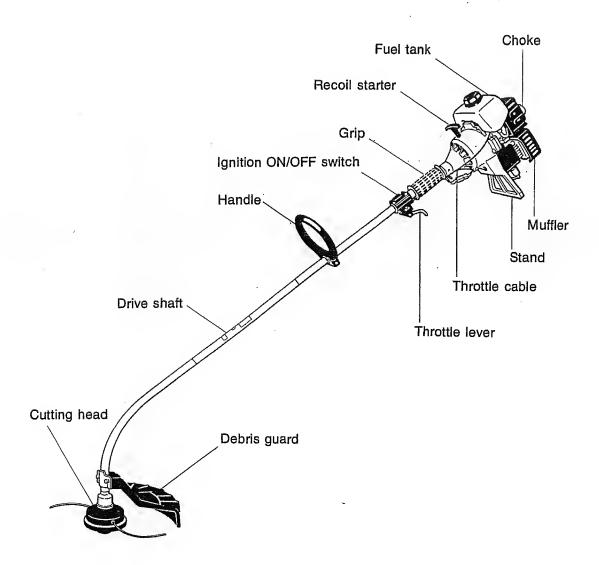
- \* Eliminate all sources of sparks or flame (including smoking, open flames, or work that could cause sparks) in the areas where fuel is mixed, poured, or stored.
- \* Mix, pour, and store fuel in an approved, marked container and in a well ventillated area.
- \* Do not smoke while handling fuel or while operating the unit.
- \* Wipe up all spills before starting the engine. Move at least 10 feet (3 meters) away from fuel and fueling site before starting the engine.

#### Operate your unit safely

- \* Inspect the entire unit before each use for worn, loose, or damaged parts. Do not use until the unit is in proper working order.
- \* Keep the handles free of oil and fuel.
- Never start or run the engine inside a closed room or building. Exhaust fumes contain dangerous carbon monoxide.
- \* Never use the unit without the debris guard attached in place.
- \* Never use wire in place of the nylon monofilament cutting lines. The wire tip can break off during cutting and become a dangerous missile.
- \* Stop engine before removing the fuel cap.
- \* Do not use any accessory or attachement other than those supplied by the manufacturer for use with this particular unit.
- \* Use only for jobs explained in this manual.

#### Maintain your unit Properly

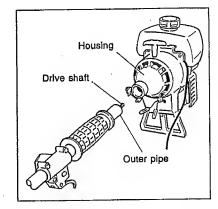
- \* Maintain the unit according to recommended procedures. Keep the cutting lines at the proper length.
- \* Disconnect spark plug before performing maintenance except for carburetor adjustment.
- \* Use only recommended, genuine replacement parts to avoid creating a hazard and/or voiding your warranty.
- \* Start the engine with the cutting head supported off the ground and unable to contact any object.
- \* Drain fuel from the tank after each use. Do not store without draining fuel from the unit.
- \* Do not store the unit or fuel in a closed area where fuel vapors can reach an open flame from hot water heaters, furnaces, etc.
- \* Store in a dry area out of the reach of children.



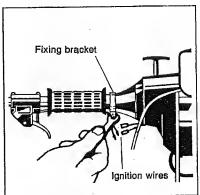
## 3. Assembly

#### A. Engine and Shaft

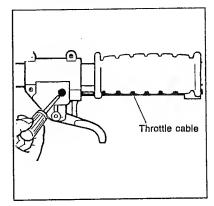
- 1) Align the square end of the drive shaft with the square hole inside the housing.
- 2) Slide the outer pipe into the housing, twisting slightly to ensure the flexible drive engages.



- 3) Tighten the fixing bracket over the housing with the supplied nuts.
- 4) Connect ignition wires (Red→Red/Black→Black).

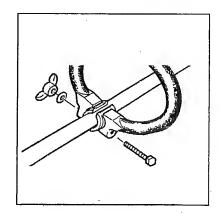


- 5) Feed the throttle cable through the two holes in the handle grip and insert cable lead into the throttle trigger.
- 6) Ensure cable lead is located in the trigger, then tighten screw to secure.



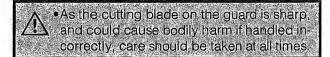
#### B. Handle

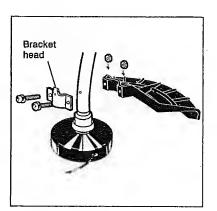
- Extend the handle gap and fit it over the shaft. Ensure that the rubber sleeves are aligned correctly.
- Secure with the supplied screw, washer and wing nut.
- Note that the handle position is adjustable. Adjust so the face of the nylon cord head will come flat to the ground when you take operating position.



#### C. Debris Guard

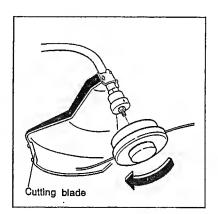
- Insert the two nuts into the attaching side of the guard.
- Align the protrusion in the fixing bracket with the hole in the shaft. Point the head of the bracket upwards.
- 3) Tighten with the two screws.



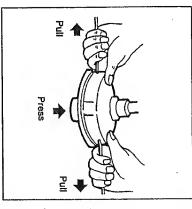


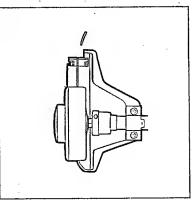
#### D. Nylon line head

- 1) Screw nylon line head onto end of shaft.
- 2) Press the line adjustment cap and pull the nylon cord out to a length of about 5".



 The cord will be cut automatically to the correct length upon rotation of the head.





## 4. Controlling Engine

#### 1. Fueling

Mix a regular grade gasoline (leaded or unleaded, alcohol-free) and RedMax® motor oil or a quality-proven air cooled 2-cycle engine oil.
 Recommended mixing ratio is 32 to 1.

#### 32:1 Mix Chart

Gasoline	-gallons	1	2	3	4	5
2-cycle oil	-ounces	4	8	12	16	20

•Keep open flames away from the area where fuel is handled or stored.
 •Mix and store fuel only in an approved gaso-line container.

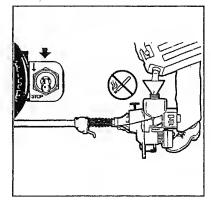
Make sure to use the proper fuel as most engine failures are caused by or closely related to the fuel used at that time. For example;

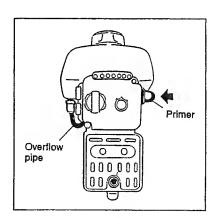
- If no oil is mixed in the fuel, the engine will undergo a poor lubrication, resulting in heavy damage to the piston and cylinders in a very short time.
- An alcohol-mixed fuel can deteriorate the rubber parts used in the fuel supply system.
- The use of a motor oil for 4-cycle engines will lead to the spark plug fouling, carbon accumulation, and the piston ring sticking.
- The use of an aged fuel can cause a starting failure and lack of power.
- Water-contaminated fuel can cause fluctuated engine revolution and carburetor corrosion.

#### 2. Cold Engine Starting

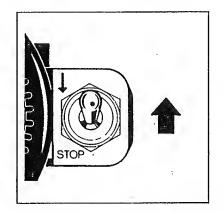
1. Press primer until fuel flows through the overflow pipe.



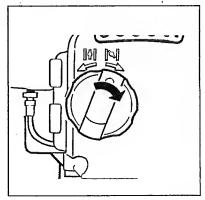




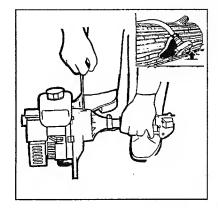
2. Set ignition switch to ON.

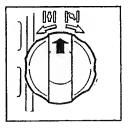


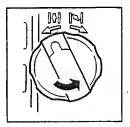
3. Turn choke knob to the ON position.



- 4. While pulling throttle lever with the little finger of your left hand, pull starter rope until engine fires once.
- 5. Turn choke to center position.
- 6. While pulling throttle lever, pull starter rope until engine fires. Run for 30 seconds to warm engine.
- 7. After engine is warmed turn choke to OFF position.
- 8. The unit is now ready for use.

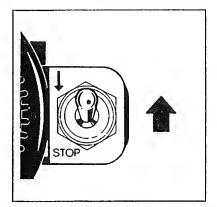


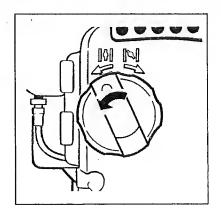




## 3. Hot Engine Start

- 1. Set ignition swtich to ON.
- 2. Turn choke knob to the OFF position.
- 3. While pulling throttle lever, pull starter rope until engine fires.
- 4. If engine fails to start follow cold start procedure.

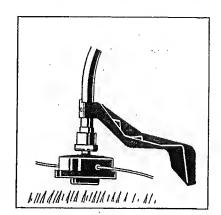


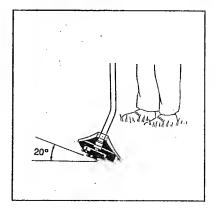


## 5. Operation

#### **Cutting Position**

- 1. Hold the unit on your right side.
- 2. The handle should be adjusted so the face of the cutting head will come flat to the ground when you take operating position.
- Hold the unit so the head is tilted up, approximately 20 degrees to your left when viewed from the operating position.
- $\triangle$
- Always wear eye protection such as safety goggles. Never lean over the rotating outting head. Rocks or other debris could be thrown into eyes and face and cause serious personal injury.
- Always keep the debris guard in place when the unit is being operated.

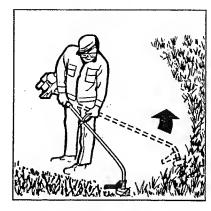




#### **Cutting Methods**

Always remember — the tip of the line does the cutting. You will achieve better results by not crowding the line into the cutting area. Allow the unit to trim at its own pace.

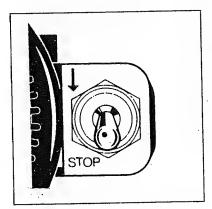
- \* Always do cutting with engine running at full throttle. A slow turning head can easily be caught by cut grass.
- \* Guide the unit in a semicircular motion from your right to left. To clear large areas, guide the unit over a semicircular area of about 6-7 feet at a time. Advance forward about five inches after each cut.



- \* Use a slow, deliberate action to cut heavy growth. The rate of cutting motion will depend upon the material being cut. Heavy growth will require slower action than will light growth.
- \* Never swing the unit so hard that you are in danger of losing your balance or control of the unit.
- \* Try to control the cutting motion with the hip rather than placing the full workload on the arms and hands.
- \* Take precautions to avoid wire, grass, and dead, dry, long-stem weeds from wrapping around the head shaft. Such materials can stall the head and cause the clutch to slip.

#### 4. Stopping Engine

- Release throttle lever and allow engine to idle for a minute.
- 2. Set the ON/STOP switch to STOP.



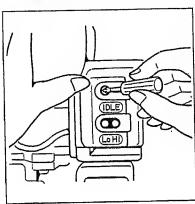
## 5. Adjustment of Idling speed

 Adjust the idle speed screw until the engine idles without rotating the nylon cord head.

To increase idling speed turn screw clockwise.

To decrease idling speed turn screw counter-clockwise.

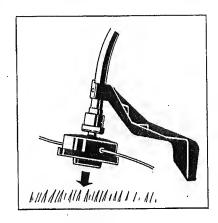
Note: The "LO" "HI" screws are for service personnel only — do not adjust.



#### **Adjusting the Cutting Line**

#### 1) Automatic adjustment

- 1. Operate the engine at least one-half throttle.
- 2. Hold cutting head parallel to and above a grassy area of the ground.
- 3. Tap the cutting head lightly on the ground one time. Approximately 1-1/4 inches of line will be advanced after each tap.



#### NOTE:

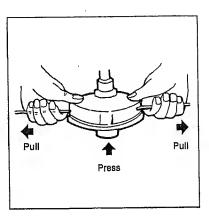
Always tap the cutting head on a grassy area or the ground.

Tapping on hard surfaces such as concrete or asphalt can cause excessive wear to the cutting head.

Avoid tapping the cutting head unnecessarily as too long a line makes the engine speed slow and thus not cut to its best efficiency.

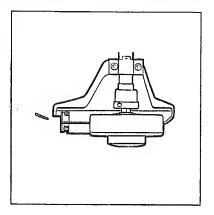
#### 2) Manual adjustmentment

- 1. Depress and hold the protruding section at the center of the cutting head.
- 2. Pull the nylon cords out to a length of about 5".
- 3. Release the center of the cutting head.



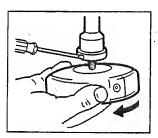
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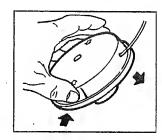
 When adjusting the cord manually, confirm that the ignition switch is set to STOP, and the spark plug lead removed.

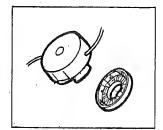


## 6. Replacing the Cutting line

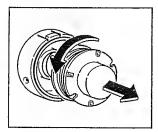
- 1. Remove cutting head from shaft.
- 2. Depress each side and remove top of head.

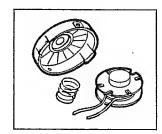


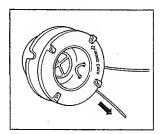




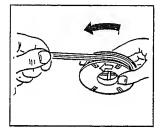
- 3. Twist the center counterclockwise and remove.
- 4. Feed nylon cord, in equal lengths about the center, from the inside of the cord holder.

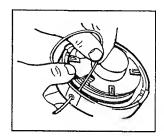


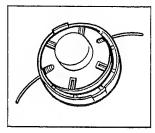




- 5. Wind both cords in direction of arrow. Do not wind too tightly, as it could inhibit the automatic line cord adjustment function.
- 6. Feed the line cords through the holes in the outer covering.
- 7. Pull to take up slack, then press down the center line cord holder ensuring the spring is correctly placed.

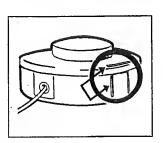


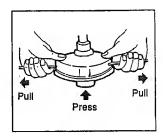


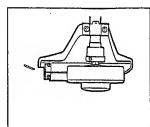


- 8. Confirm the slits in the outer case are
- aligned with slits on the cord holder.

  9. Press together until the outer case and cord holder are securely fixed.
- 10. While pushing the center of the cutting head pull each line cord out to about 5 inches in length.







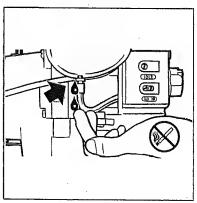
#### 7. Maintenance

Before cleaning, inspecting or repairing your unit, make sure that engine has stopped and is cool, make sure to disconnect the spark plug lead.

#### A. After every use:

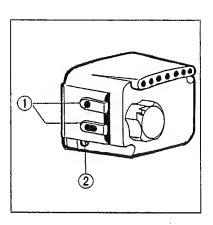
- Remove all dust, dirt and grass from the entire unit.
- Check complete unit for loose or missing fasteners or parts. Correct if found.
- Check engine for any fuel leaks.





#### B. Every 30 hours use:

- · Clean air filter with gasoline.
- 1. Remove grommets around adjusting screws.
- 2. Unfasten the two screws, to remove the cover.

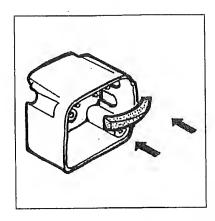


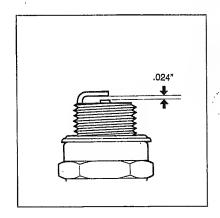
- 3. Take out air filter from the cover.
- 4. When replacing, insert both ends first as shown in the figure.
- 5. Place choke plate and the knob at open position equally.
- 6. Install the cover and fit grommets as before.

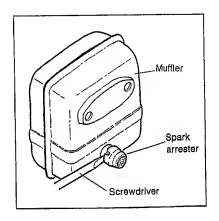
#### NOTE:

Dry completely before re-installing.

- Remove and clean spark plug. Check and adjust air gap to .024".
- Use Champion RCJ-8 or N.G.K. BMR6A for replacement plug.
- Check fuel filter in tank and clean or replace if needed.
- Remove cylinder cover, clean out all dust and dirt.
- Spark Arrester—Lack of power and starting failure can be caused by carbon built up in the exhaust passage. Clean or replace the spark arrester as necessary.
- 1. Loosen two screws and remove the muffler.
- 2. Ply off the spark arresting screen from the exhaust port, using the flat blade of the attached screwdriver.
- 3. When installing the spark arresting screen, press it until it clicks.

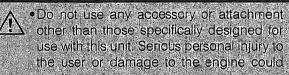




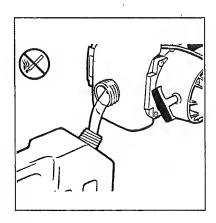


#### C. Storage:

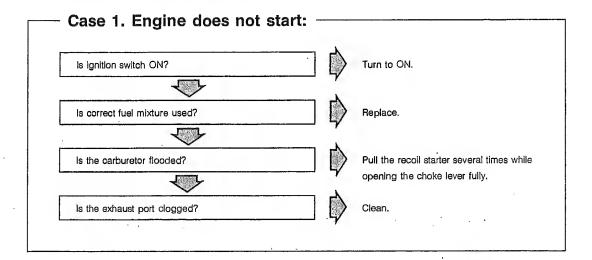
- Drain fuel tank and run engine out until all fuel in carburetor is used up.
- Remove spark plug and drop a spoonful of oil into the cylinder. Crank engine several times and replace spark plug. Pull starter until compression is felt.
- Store unit in a dry, dust-free place.

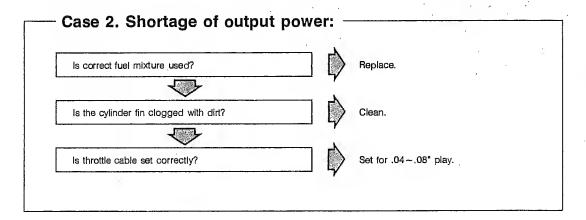


result.



## 8. Troubleshooting Guide





When your unit seems to need further service, please consult our service shop in your area.

## 9. Specifications

Model Name	BT17				
Weight	10.8 lbs (4.9 kg)				
Туре	Single cylinder gasoline engine				
Engine	G1E				
Туре	Two cycle air cooled gasoline engine				
Displacement	1.05 cu in (17.2cc)				
Ignition	Solid-state				
Carburetor	Diaphragm type				
Fuel	Two cycle oil premixed gasoline (Gas 32 : Oil 1)				
Spark plug	RCJ8				
Fuel tank capacity	1.05 pints (0.5 liter)				
Max. output	0.6 HP/6500 rpm				
Rotation	Clockwise (operator view)				

Specifications are subject to change without notice.

# RedMax® TRIMMER MODEL BT17 2-YEAR LIMITED WARRANTY

For two (2) years [90 days if used commercially] from the date of original purchase of the BT17 unit, KOMATSU ZENOAH AMERICA INC., through any RedMax® dealer, will repair or replace, free of charge, for the original purchaser, any part or parts found to be defective in material and/or workmanship. **This Is the exclusive remedy**.

The purchaser shall bear costs of transporting the unit to and from the RedMax® dealers.

This warranty does not apply to those units which have been damaged by accident, mishandling, alteration, abuse, improper lubrication, the use of any parts or accessories other than those specified by the Company, or other causes beyond our control.

This warranty does not cover those parts replaced for normal wear or harmless changes in their appearance.

#### There are no other express warranties.

IMPLIED WARRANTIES including those of merchantability and fitness for a particular purpose ARE LIMITED to one (1) year [90 days for commercial use] from the original purchase date. **Liabilities** for incidental or consequential damages under any and all warranties are excluded.

Some states do not allow limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

IMPORTANT:

You will receive a Warranty Registration Card at time of purchase. Please keep the card and return it when sending your machine in for a repair.



KOMATSU ZENOAH AMERICA INC. 1505 Pavilion Place Suite A Norcross, Georgia, 30093

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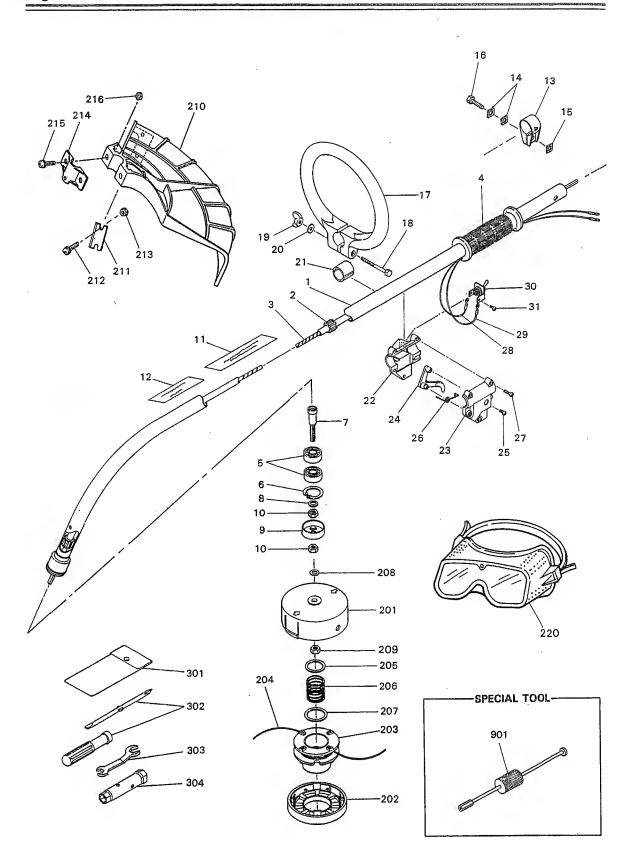


# Trimmer

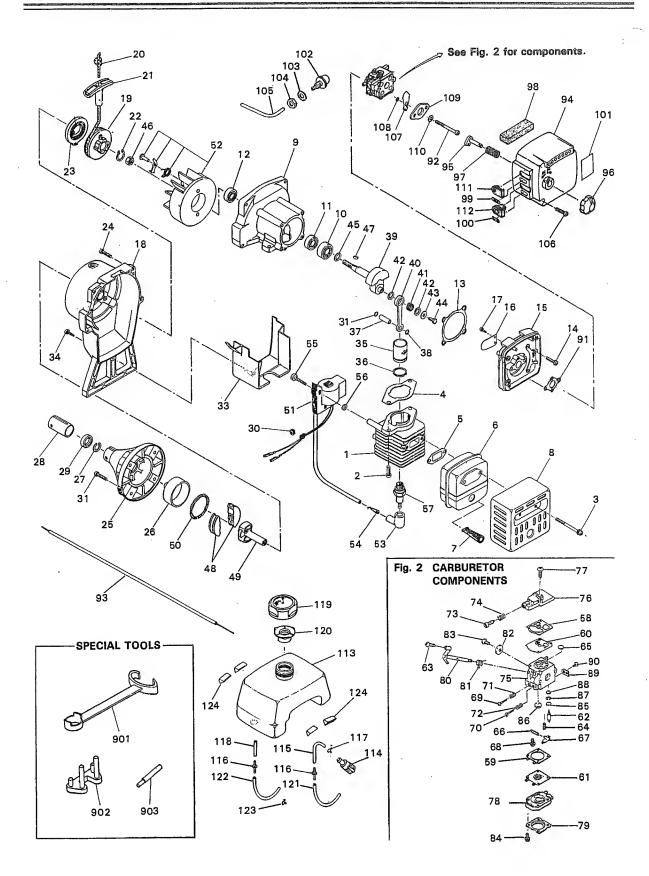
Service Parts List

Note: The parts indicated by " \* " in the Part Number column are supplied, not individually but, as an assembly. Please see the Remarks for assembly part number.

Those parts with "OP" in the Remarks column are not supplied with standard unit, but available by separate order.



Index No.	Part Number	Description	Q'ty per Unit	Remarks
	3238-11001	Pipe assy		1 to 10
1 2	3238-11102 * *	Pipe comp. Pipe Liner comp.	1 1	1 & 2 *3238-11102 *3238-11102
3 4 5 6 7 8 9	3238-11230 3238-14550 06031-06201 04065-03212 3238-11130 0291-20816 3238-11140 0280-10806	Shaft, flexible Grip Ball bearing Snap ring Shaft Washer Cover Nut	1 2 1 1 1 1 2	
11 12	6049-11530 3584-11540	Plate, name Plate, caution	f' 1	
13 14 15 16	3238-11350 3238-11360 3238-11370 0224-00635	Clamp, engine Plate Nut Bolt	1 2 1 1	
17 18 19 20 21	3238-12110 0224-00650 3238-12130 0291-20616 3238-12140	Handle Bolt Wing nut Washer Spacer	1 1 1 1 2	
22 23 24 25 26 27 28 29	6049-12400 3238-14512 3238-14522 3238-14531 0260-00506 3238-14540 1900-31410 3238-14150 3238-14161	Throttle lever assy Case (R) Case (L) Lever, throttle Screw, cable retaining Spring, return Screw Cord (A) Cord (B)	1 1 1 1 1 3 1	22 to 31  Black Red
30	3238-06020	Switch kit Switch	1	30 & 31
201	0260-00405 3510-15000 3231-99111	Screw Auto head assy Case (A)	2	201 to 209
202 203 204 205 206 207 208 209	3231-99131 3503-99140 3238-15180 3268-15150 3268-15160 3268-15170 0291-20816 3268-15140	Case (B) Cord holder Cord Plate Spring Plate Washer Nut	1 1 1 1 1 1 1 1 1	
210 211 212 213 214 215 216	6333-23101 6333-23111 3238-23130 0260-30412 3238-13150 3238-23120 0260-30620 0280-10605	Guard assy Guard Cutter Screw Nut Clamp, guard Screw Nut	1 1 2 2 1 2 2	210 to 216
220	6242-92110	Goggle	-1	1
301 302 303 304	3238-91001 3238-91110 1030-91340 3239-91131 3239-91310	Tool set Bag Screwdriver Spanner Socket	1 1 1 1	Convertible
901	3238-99100	Bearing puller		OP



Index No.	Part Number	Description	Q'ty per Unit	Remarks	Index No.	Part Number	Description	Q'ty per Unit	Remarks
1 2 3 4 5	1260-12110 0260-00616 0260-30555 1260-13120 1260-13140	Cylinder Screw, cylinder mtg. Screw, muffler mtg. Gasket, cyfinder Gasket, muffler	1 2 2 1		68 69 70	3310-81240 1270-81070 1262-81330	Screw, lever pin Needle, low speed Needle, low speed	1 1	Standard: 114 turns open Standard: 1 turn open
6 7	1267-15100 1267-15110 1601-15120	Muffler assy Muffler Spark arrester	1 1	6 & 7	71 72 73 74 75	3310-81160 3310-81320 1282-81540 1282-81460 *	Spring, low speed Spring, high speed Screw, idle adjust Spring, idle screw Body assy	1 1 1 1 1	*1270-81000 ·
9 10 11 12	1260-15210 1260-21100 1260-21110 06030-06201 1260-21180 06035-06001 1260-21170	Guard, muffler  Crankcase comp. Crankcase Ball bearing, inner Oil seel Ball bearing, outer  Gasket, crenkcase	1 1 1 1 1	9 to 12	76 77 78 79 80 81 82 83 84	3310-B1130 1270-B1490 1751-B1520 1262-B1370 1282-B1410 1262-B1340 3310-B1360 1148-B1530	Cover, pump Screw, pump cover Body essy, eir purge Cover, primer pump Shaft assy, throttle Spring, throttle return Valve, throttle Screw, shutter Screw, pump cover	1 1 1 1 1 1 1 4	
14 15 16	1260-21190 1262-21201 1282-21211 1260-21220	Screw, crankcase  Cover comp., crankcase Cover, crankcase Reed valve	1 1 2	15 to 17	85 86 87 88 89 90	3304-81420 3304-81430 3304-81440 3304-81450 3310-81390 3310-81351	Plug, mein welch Plug, idle welch Ring, velve retaining Screen, check valve Clip, throttle shaft Screw, shaft retaining	1 1 1 1 1 1	Press-fit to Body Press-fit to Body
17 18 19 20 21 22 23 24	1260-21241 1266-31101 3330-75311 1260-75151 1260-75170 04064-01812 3330-75201 0261-00516	Screw, reed valve  Cover comp., fan Reel, starter Rope, starter Knob, starter Snap ring Spring holder comp. Screw, fan cover	1 1 1 1 1 4		91 92 93 94 95 96 97	1185-13130 0260-00540 1260-83110 1272-84100 * 1260-84120 1263-84130 1260-84140	Gasket, carburetor Screw, carburetor Cable, throttle Cover comp., air cleaner Cover, air cleaner Lever choke Knob, choke Spring, friction	1 1 1 1 1	94 to 101 *1272-84100
25 26 27	1266-31200 1266-31210 1260-31220 3130-13270	Housing comp., clutch Housing, clutch Drum, clutch Snap ring	1 1 1	25 to 27	98 99 100 101	1260-84160 1260-84210 1260-84220 1267-84230	Element, air filter Label (Idle) Label (Lo-Hi) Label (Choke)	1 1 1	
28 29 30	1260-31233 1260-31260 1260-31250 0260-00520	Sleeve Spacer Grommet, switch wire Screw, housing	1 1 1 4		102 103 104 105 106	1270-82610 1270-82620 1270-82630 1270-82640 0260-00520	Body, primer pump Washer Nut Hose, pump Screw, cleaner cover	1 1 1 2	
33 34 35 36 37 38 39 40 41 42	1260-42201 1260-42111 1260-00609 1260-42252 1260-42260	Thrust washer Washer	1 1 1 2 1 1 2 1 1	13 pcs. a set	107 108 109 110 111 112	1260-84150 3310-82110 1256-84171 01642-20508 1260-84180 1260-84190 1270-85000 1270-85100	Plate, choke Washer, choke plate Plate, choke retaining Washer, cerb. screw Grommet, idle screw Grommet, speed needle Fuel tenk assy	1 2 1 1	Used on lett side only  113 to 120 113 to 118 +1270-85100
44 45 46 47	1900-42410 0282-10805 1260-43240 1260-51002	Washer Nut Key Clutch assy	1 1 1	48 to 50	114 115 116 117 118	1850-85300 1260-85420 1260-85411 1260-85460	Fuel filter assy Pipe, suction Joint Clip	1 1 2 1	
48 49 50	1260-51120 1260-51222	Boss, clutch Spring, clutch	1 1		119 120		Fuel cap	1 1	119 & 120 +1260-85202
51 52 53 54 55 55	1260-71200 1400-72111 1400-72121 1260-71250 1260-71260	Rotor comp. Cap, spark plug Spring, plug cap Screw, module Spacer	1 1 2 2 1	Champion RCJ-8	121 122 123 124	1270-85150 1950-86120	Pipe, return	1 1 1 4	l= 105 mm (4.1") l= 165 mm (6.5")
58 58 60 61 62 63 64 65 66	1751-81470 3304-81150 3310-81260 3310-81310 8 1282-81550 4 1262-81270 5 3306-81380 6 3310-81250	Gesket, pump Gesket, diaphregm Diaphregm, pump Diephragm essy Valve, Inlet Screw, cable retainin Spring, metering leve Screen, inlet Pin, metering lever	1 1 1 1 1 1 1 1 1 1 1	WA180 58 to 90 K1 K2 K1 K2 K1 K2 K1 K2 K2 K2 K2 K2 K2 K2	901 902 903 K1 K2	1260-99120 1260-99140 1270-06020	Stopper, cranksheft Guide, piston pin Gasket kit	1 1	OP OP OP OP